

Appl. No. 10/650,588

Amdt. Dated June 9, 2005

Response to Office Action of March 9, 2005

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in this application.

1. (Currently Amended) A method for fixation of optical fiber in an optical device module ~~connecting~~, said module comprising a case incorporating with an integrated optical element, and the said optical fiber being installed from the outside an exterior of said case into said optical element, which comprises comprising the steps of:

~~using~~ utilizing a fixation pipe configured to receive insertion of, ~~into which~~ said optical fiber is inserted, ~~and which can fix~~, and adapted for affixation of said optical fiber by means of a solder in the an intermediate part of inserting direction said fixation pipe, the an external surface of which has said intermediate part of said fixation pipe comprising a groove for a copper bit;

~~setting~~ positioning and installing said fixation pipe to said case ~~in order that such that said intermediate part of said fixation pipe is positioned~~ may be located on the outside of said case;

~~placing~~ inserting said optical fiber inside said fixation pipe ~~in order that the strip part, where the so that a stripped part, wherein a coating coated part of said optical fiber is has been removed, may be located is positioned in said intermediate part of said fixation pipe, at least, and the a coated part of said optical fiber may be located somewhere is positioned in the opposite side of to said case from said intermediate part;~~

and contacting a copper bit ~~with~~ to said groove for copper bit ~~and fixing to affix~~ said optical fiber to the fixation pipe by a solder.

2. (Currently Amended) A method for fixation of optical fiber in an optical device module as claimed in claim 1, ~~which comprises that~~

wherein a planing for alignment of the solder is formed on ~~the~~ an internal surface of said intermediate part of the fixation pipe, and

comprising the further step of locating, in fixing said optical fiber to the fixation pipe by a solder, said solder is located on said planing when affixing said optical fiber to the fixation pipe by a solder.

3. (Currently Amended) A method for fixation of optical fiber in an optical device module as claimed in claim 1 ~~or 2, which comprises that~~, further comprising the step of refrigerating a side of said fixation pipe that is opposite to said case, while affixing in fixing said optical fiber to the fixation pipe by a solder, ~~the opposite side of said case from said intermediate part is refrigerated.~~

4. (Currently Amended) A method for fixation of optical fiber in an optical device module as claimed in claim 3, ~~which comprises that~~ wherein said ~~method of refrigerating~~ step is performed by contacting an endothermic member to said fixation pipe.

5. (Currently Amended) A method for fixation of optical fiber in an optical device module as claimed in claim 4, ~~which comprises that~~ further comprising the step of clipping said endothermic member ~~has the structure for clipping to~~ said fixation pipe.

6. (Currently Amended) A method for fixation of optical fiber in an optical device module as claimed in claim 3, ~~which comprises that~~ wherein said ~~method of refrigerating step~~ is performed by blowing compressed air to said fixation pipe.

7. (Currently Amended) A method for fixation of optical fiber in an optical device module as claimed in ~~claims 1 to 6, which comprises that~~ claim 1, wherein fusion of the solder ~~fusion~~ is performed by electrifying the fixation pipe with said copper bit.

8. (Currently Amended) A fixation pipe for fixing an optical fiber in an optical device module, said module comprising connecting a case incorporating having an integrated optical element, and the said optical fiber being installed from the outside an exterior of said case into said optical element, ~~which comprises that the comprising~~

planing for alignment of the solder that is formed on the an internal surface of an intermediate part of said fixation pipe, and

the a groove for a copper bit that is formed on the an external surface of an intermediate part of said fixation pipe,

wherein said planning and said groove are located outside said case in setting said fixation pipe to the case.

9. (Currently Amended) A fixation pipe as claimed in claim 8, ~~which comprises~~ further comprising an opening formed adjacent to said planing.

10. (New) A method for fixation of optical fiber in an optical device module as claimed in claim 2, further comprising the step of refrigerating a side of said fixation pipe that is opposite to said case, while affixing said optical fiber to the fixation pipe by a solder.

11. (New) A method for fixation of optical fiber in an optical device module as claimed in claim 2, wherein fusion of the solder is performed by electrifying the fixation pipe with said copper bit.

12. (New) A method for fixation of optical fiber in an optical device module as claimed in claim 3, wherein fusion of the solder is performed by electrifying the fixation pipe with said copper bit.

13. (New) A method for fixation of optical fiber in an optical device module as claimed in claim 4, wherein fusion of the solder is performed by electrifying the fixation pipe with said copper bit.

14. (New) A method for fixation of optical fiber in an optical device module as claimed in claim 5, wherein fusion of the solder is performed by electrifying the fixation pipe with said copper bit.

15. (New) A method for fixation of optical fiber in an optical device module as claimed in claim 6, wherein fusion of the solder is performed by electrifying the fixation pipe with said copper bit.